

# Fact Sheet



## *For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: R30-NGGP-2007-09900014  
Application Received: January 28, 2002  
Plant Identification Number: **09900014**  
Permittee: **Columbia Gas Transmission**  
Facility Name: **Kenova Compressor Station**  
Mailing Address: **1700 MacCorkle Avenue, SE**  
**Charleston, WV 25314**  
Issued: October 24, 2007

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Physical Location:	Route 1, Neal, Wayne County, West Virginia
UTM Coordinates:	360.9 km Easting • 4248.0 km Northing • Zone 17
Directions:	Traveling I-64 West from Charleston, take the Kenova-Ceredo exit for US Route 52. Follow US 52 South approximately 2 miles to Route 1 intersection. The station is located on Route 1 near the intersection of Route 1 and Route 52

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### **Facility Description**

The Kenova Station is a natural gas transmission and oil and gas production facility covered by Standard Industrial Code (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of four (4) 2000-hp, four (4) 1100-hp natural gas fired reciprocating compressor engines, a wastewater evaporation injection system and numerous storage tanks of various sizes. On site support equipment includes one (1) 500-hp emergency generator, one (1) 0.275 MMBtu/hr heating system boiler and one (1) 1.5 MMBtu/hr line heater. The facility also has a 1,000 gallon mercaptan tank with flare to control odor.

## Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2006 Actual Emissions
Carbon Monoxide (CO)	802.4	473.3
Nitrogen Oxides (NO <sub>x</sub> )	1,338.5	1,023.3
Particulate Matter (PM <sub>10</sub> )	13.3	10.9
Total Particulate Matter (TSP)	13.3	10.9
Sulfur Dioxide (SO <sub>2</sub> )	0.4	0.3
Volatile Organic Compounds (VOC)	47.8	36.3
<i>PM<sub>10</sub> is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2006 Actual Emissions
Formaldehyde	11.4	9.3*
Other HAPs	4.5	0.00
Total HAPs	15.8	9.3
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
<i>* These CY2006 emissions were calculated based on test derived factors. Company performed formaldehyde emission testing for the engines in March 2005, which showed much less formaldehyde emissions than AP-42 factor.</i>		

## Title V Program Applicability Basis

This facility has the potential to emit 802.4 tons/yr of CO, 1,338.5 tons/yr of NO<sub>x</sub> and 11.4 tons/yr of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant and over 10 tons per year of a single HAP, Columbia Gas Transmission Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	SO <sub>2</sub> Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permit for construction, modification
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.

	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
PD05-097	August 10, 2005	<i>RICE-MACT non-applicability determination</i>
R13-2251C	May 3, 2007	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the General Requirement Comparison Table B which may be downloaded from DAQ's website.

### Determinations and Justifications

A very small 0.002 MMBtu/hr Columbia Gas custom built flare is used exclusively for odor control during filling of mercaptan tank (A24). Use of flare is limited to only 200 hrs in a year; hence no additional testing or MRR (Monitoring, recordkeeping and reporting) for opacity or mass emissions is appropriate. Calculations of particulate matter emissions using AP-42 factors for Natural Gas Combustion and Soot Formation at Flares (Sections 1.4 and 13.5, respectively) indicate that emissions from the flare are only a small fraction (<10%) of the mass limit established by 45CSR6.

### Non-Applicability Determinations

This facility is a major source of HAPs. However, according to sections f and h below no MACT is applicable to this facility.

The following requirements have been determined not to be applicable to the subject facility due to the following:

- 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Kenova station are below 40,000 gallons in capacity.
- 40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at Kenova station are below 75m<sup>3</sup> in capacity.

- c. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Kenova station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
- d. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: All storage tanks at Kenova station are below 40,000 gallons in capacity, hence 45CSR§21-28 is not applicable. Kenova station is not engaged in the extraction or fractionation of natural gas, hence 45CSR§21-29 is not applicable.
- e. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
- f. 40 C.F.R. 63 Subpart ZZZZ; *RICE MACT* – This is a natural gas transmission and oil and gas production facility. Based on PD05-97, neither the natural gas transmission and storage section of the facility nor the oil and gas production section of the facility, when taken individually, emit over 10 tons per year of individual HAPs nor 25 tons per year of all aggregated HAPs; and they cannot be aggregated for major source determination. Hence this facility is not subject to ZZZZ.
- g. 40 C.F.R. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* – The boiler and heater at this facility are less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
- h. 40 C.F.R. 63 Subpart DDDDD; *Boiler MACT* - The boiler and heater at this facility use gaseous fuel and is less than 10 MMBtu/hr; Hence Subpart DDDDD is not applicable. Boiler MACT regulations were vacated in accordance with D.C. Circuit of Appeals (June 8<sup>th</sup> 2007) ruling.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines. Also 45CSR10 is not applicable to the facility boiler and heater because they are less than 10 MMBtu/hr.

40 CFR 64 - Engines and turbines do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility. Boiler and heater are not a major source; therefore, CAM is not applicable.

According to 45CSR§2-11.1 the boiler and heater are exempt from MRR (Monitoring, recordkeeping and reporting) because they are less than 10 MMBtu/hr.

### **Request for Variances or Alternatives**

None

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Title V general Permit has already been advertised and finalized. This fact sheet for facility registration is written for the file. This fact sheet states which rules are applicable to the particular facility and which rules are not applicable.

### **Procedure for Requesting Public Hearing**

N/A

**Point of Contact**

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Division of Air Quality  
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**Response to Comments (Statement of Basis)**

N/A